



PATENT

GAU 2621

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF : Hui Cheng  
FOR : **A RATE-DISTORTION OPTIMIZATION  
SYSTEM AND METHOD FOR IMAGE  
COMPRESSION**  
SERIAL NO. : 09/724,330  
FILED : November 29, 2000  
EXAMINER : Unknown  
ART UNIT : 2621  
LAST OFFICE ACTION : None  
ATTORNEY DOCKET NO. : XER 2 0362  
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Technology Center 2600

Cleveland, Ohio 44114-2518  
March 13, 2001

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner of Patents  
Washington, D.C. 20231

Dear Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, 1.98 and MPEP § 609, applicant submits the following Disclosure Statement concerning art of which the applicant is aware. A copy of PTO-1449 is enclosed herewith.

Under § 1.98(a)(3), no concise explanation of relevance is required for information that is in the English language. Accordingly, the enclosed patents require no further explanation (or no translation is available).

5,535,013 - Murata

5,682,249 - Harrington, et al.

H. Cheng and C.A. Bouman, "Document Compression Using Rate-Distortion Optimized Segmentation," Journal of Electronic Imaging, pp. 1-33, July 1999.

H. Cheng and C.A. Bouman, "Multilayer Document Compression Algorithm," Proceedings of the International Conference on Image Processing, Kobe Japan, Oct. 25-28, 1999.

H. Cheng and C.A. Bouman, "word: Segmentation Which Optimizes the Rate-Distortion Function," IT Workshop on Detection, Estimation, Classification, and Imaging, Santa Fe, NM, Feb. 24-26, 1999.

K. Konstantinides and D. Tretter, "A Method for Variable Quantization in JPEG for Improved Text Quality in Compound Documents," IEEE, pp. 565-568, 1998.

H. Cheng and C. A. Bouman, "Trainable Context Model for Multiscale Segmentation," IEEE, pp. 610-614, 1998.

M. Effros and P.A. Chau, "Weighted Universal Bit Allocation: Optimal Multiple Quantization Matrix Coding," IEEE, pp. 2343-2346, 1995.

K. Ramchandran and M. Vetterli, "Rate-Distortion Optimal Fast Thresholding with Complete JPEG/MPEG Decoder Compatibility," IEEE, pp. 700-704, 1994.

C.A. Bouman and M. Shapiro, "A Multiscale Random Field Model for Bayesian Image Segmentation," IEEE, pp. 162-177, 1994.

A. Ortega and K. Ramchandran, "Rate-Distortion Methods for Image and Video Compression," IEEE Signal Processing Magazine, pp. 23-50, 1998.

A. Said and W. A. Pearlman, "A New, Fast, and Efficient Image Codec Based on Set partitioning in Hierarchical Trees," IEEE, pp. 243-250, 1996.

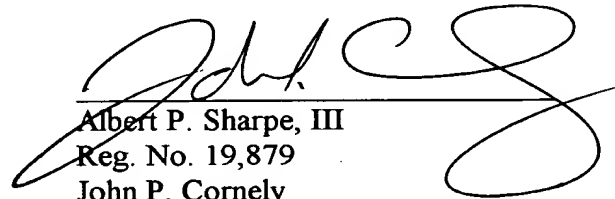
P. G. Howard, et al., "The Emerging JBIG2 Standard," IEEE, pp. 838-848, 1998.

M. T. Orchard and C. A. Bouman, "Color Quantization of Images," IEEE, pp. 2677-2690, 1991.

Under § 1.97(c)(2), this information shall be considered if filed before the mailing date of a final action if accompanied by a fee in the amount of \$ as required by §1.17(p). The required fees should be charged to Deposit Account No. 24-0037.

Respectfully submitted,

FAY, SHARPE, FAGAN,  
MINNICH & McKEE, LLP

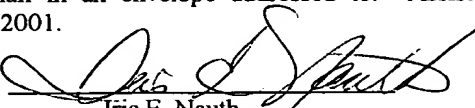


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**CERTIFICATE OF MAILING**

I hereby certify that this **INFORMATION DISCLOSURE STATEMENT** is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner of Patents, Washington, D.C. 20231, on March 13, 2001.

By:   
Iris E. Nauth